

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:

Andrew W. McCULLOUGH *et. al*

Appl. No.: *To Be Assigned*

Filed: Herewith on September 23, 2003

For: **Illumination System with Spatially  
Controllable Partial Coherence  
Compensating for Line Width  
Variances in a Photolithographic  
System**

Confirmation No.: *To Be Assigned*

Art Unit: *To Be Assigned*

Examiner: *To Be Assigned*

Atty. Docket: 1857.1040003

**Information Disclosure Statement**

Commissioner for Patents  
PO Box 1450  
Alexandria, VA 22313-1450

Sir:

Listed on accompanying Form PTO-1449 are documents that may be considered material to the examination of this application, in compliance with the duty of disclosure requirements of 37 C.F.R. §§ 1.56, 1.97 and 1.98.

Where the publication date of a listed document does not provide a month of publication, the year of publication of the listed document is sufficiently earlier than the effective U.S. filing date and any foreign priority date so that the month of publication is not in issue. Applicants have listed publication dates on the attached PTO-1449 based on information presently available to the undersigned. However, the listed publication dates should not be construed as an admission that the information was actually published on the date indicated.

Applicants reserve the right to establish the patentability of the claimed invention over any of the information provided herewith, and/or to prove that this information may not be prior art, and/or to prove that this information may not be enabling for the teachings purportedly offered.

This statement should not be construed as a representation that a search has been made, or that information more material to the examination of the present patent application does not exist. The Examiner is specifically requested not to rely solely on the material submitted herewith.

Applicants have checked the appropriate boxes below.

- ☐ 1. Statement under 37 C.F.R. 1.704(d). Each item of information contained in this Information Disclosure Statement was cited in a communication from a foreign patent office in a counterpart application and this communication was not received by any individual designated in 37 C.F.R. § 1.56(c) more than thirty days prior to the filing of this information disclosure statement.
- ☒ 2. Filing under 37 C.F.R. § 1.97(b). This Information Disclosure Statement is being filed within three months of the date of filing of a national application other than a continued prosecution application (CPA), OR within three months of the date of entry of the national stage as set forth in 37 C.F.R. § 1.491 in an international application, OR before the mailing date of a first Office Action on the merits OR before the mailing of a first Office Action after the filing of a request for continued examination under 37 C.F.R. § 1.114. No statement or fee is required.
- ☐ 3. Filing under 37 C.F.R. § 1.97(c). This Information Disclosure Statement is being filed more than three months after the U.S. filing date AND after the mailing date of the first Office Action on the merits, but before the mailing date of a Final Rejection, or Notice of Allowance, or an action that otherwise closes prosecution in the application.

- ☐ a. Statement under 37 C.F.R. § 1.97(e)(1). I hereby state that each item of information contained in this Information Disclosure Statement was first cited in any communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of this Information Disclosure Statement. 37 C.F.R. § 1.97(e)(1).
- ☐ b. Statement under 37 C.F.R. § 1.97(e)(2). I hereby state that no item of information in this Information Disclosure Statement was cited in a communication from a foreign patent office in a counterpart foreign application and, to my knowledge after making reasonable inquiry, was known to any individual designated in 37 C.F.R. § 1.56(c) more than three months prior to the filing of this Information Disclosure Statement. 37 C.F.R. § 1.97(e)(2).
- ☐ c. Attached is our PTO-2038 Credit Card Payment Form in the amount of \$\_\_\_\_\_ in payment of the fee under 37 C.F.R. § 1.17(p).
- ☐ 4. Filing under 37 C.F.R. § 1.97(d) This Information Disclosure Statement is being filed more than three months after the U.S. filing date and after the mailing date of a Final Rejection or Notice of Allowance, but before payment of the Issue Fee. Enclosed find our PTO-2038 Credit Card Payment Form in the amount of \$\_\_\_\_\_ in payment of the fee under 37 C.F.R. § 1.17(p); in addition:
- ☐ a. Statement under 37 C.F.R. § 1.97(e)(1). I hereby state that each item of information contained in this Information Disclosure Statement was cited in a communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of this Information Disclosure Statement. 37 C.F.R. § 1.97(e)(1).

☐ b. Statement under 37 C.F.R. § 1.97(e)(2). I hereby state that no item of information in this Information Disclosure Statement was cited in a communication from a foreign patent office in a counterpart foreign application and, to my knowledge after making reasonable inquiry, was known to any individual designated in 37 C.F.R. § 1.56(c) more than three months prior to the filing of this Information Disclosure Statement.  
37 C.F.R. § 1.97(e)(2).

☐ 5. The document(s) was/were cited in a search report by a foreign patent office in a counterpart foreign application. Submission of an English language version of the search report that indicates the degree of relevance found by the foreign office is provided in satisfaction of the requirement for a concise explanation of relevance. 1138 OG 37, 38.

☒ 6. A concise explanation of the relevance of the non-English language document(s) appears below:

Document AL1 (JP 07-094399) appears to describe a method and device for exposure. A copy of the English language abstract of document AL1 is enclosed as document AR1 on the attached PTO01449.

Document AM1 (JP 07-201723) appears to describe a semiconductor device. A copy of the English language abstract of document AM1 is enclosed as document AS1 on the attached PTO-1449.

☐ 7. Copies of the documents are submitted herewith.

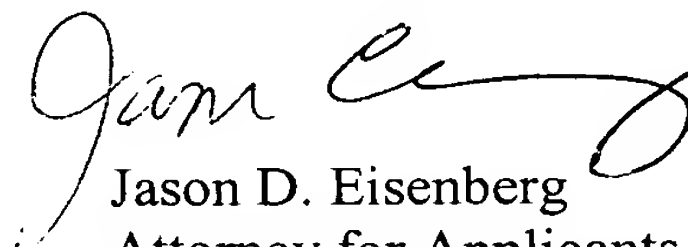
- ☐ 8. Copies of the documents were cited by or submitted to the Office in an IDS that complies with 37 C.F.R. § 1.98(a)-(c) in Application No. \_\_\_\_\_, filed \_\_\_\_\_, which is relied upon for an earlier filing date under 35 U.S.C. § 120. Thus, copies of these documents are not attached. 37 C.F.R. § 1.98(d).

It is respectfully requested that the Examiner initial and return a copy of the enclosed PTO 1449, and indicate in the official file wrapper of this patent application that the documents have been considered.

The U.S. Patent and Trademark Office is hereby authorized to charge any fee deficiency, or credit any overpayment, to our Deposit Account No. 19-0036.

Respectfully submitted,

STERNE, KESSLER, GOLDSTEIN & FOX P.L.L.C.

  
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Attorney for Applicants  
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Date: September 23, 2003

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FORM PTO-1449

## INFORMATION DISCLOSURE STATEMENT

ATTY. DOCKET NO.  
1857.1040003APPLICATION NO.  
*To Be Assigned*APPLICANT  
*McCullough et al.*FILING DATE  
*Herewith on September 23, 2003*GROUP  
*To Be Assigned*

## U.S. PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB-CLASS	FILING DATE
	AA1	4,621,922	11/1996	Tabarelli <i>et al.</i>			
	AB1	5,184,176	02/1993	Unno <i>et al.</i>			
	AC1	5,296,892	03/1994	Mori			
	AD1	5,329,336	07/1994	Hirano <i>et al.</i>			
	AE1	5,357,312	10/1994	Tounai			
	AF1	5,383,000	01/1995	Michaloski <i>et al.</i>			
	AG1	5,446,587	08/1995	Kang <i>et al.</i>			
	AH1	5,631,721	05/1997	Stanton <i>et al.</i>			
	AI1	5,642,183	06/1997	Sugihara <i>et al.</i>			
	AJ1	5,673,103	09/1997	Inove <i>et al.</i>			
	AK1	5,684,566	11/1997	Stanton			

## FOREIGN PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB-CLASS	TRANSLATION
	AL1	07-094399	04/1995	Japan	H01L	G03F	Yes No
	AM1	07-201723	08/1995	Japan	H01L	21/027	Yes No
	AN1	0 564 264 A1	10/1993	Europe	G03F	7/20	Yes No
	AO1	0 486 316 A2	05/1992	Europe	G03F	7/20	Yes No
	AP1						Yes No

## OTHER (Including Author, Title, Date, Pertinent Pages, etc.)

	AR	<u>1</u>	English-language Abstract of JP 07-094399, published April 7, 1995, from <a href="http://www.19.ipdl.jpo.go.jp/PA1/result/detail/main/wAAAFzaOGtDA407094399P1.htm">http://www.19.ipdl.jpo.go.jp/PA1/result/detail/main/wAAAFzaOGtDA407094399P1.htm</a> , 2 Pages (last visited September 9, 2003).
	AS	<u>1</u>	English-language Abstract of JP 07-201723, published August 4, 1995, from <a href="http://www.19.ipdl.jpo.go.jp/PA1/result/detail/main/wAAAxtailuDA407201823P1.htm">http://www.19.ipdl.jpo.go.jp/PA1/result/detail/main/wAAAxtailuDA407201823P1.htm</a> , 2 Pages (last visited September 9, 2003).
	AT	<u>1</u>	

EXAMINER

DATE CONSIDERED

**EXAMINER:** Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.

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*Herewith on September 23, 2003*GROUP  
*To Be Assigned*

## U.S. PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB-CLASS	FILING DATE
	AA2	6,049,374	04/2000	Komatsuda <i>et al.</i>			
	AB2	6,078,380	06/2000	Taniguchi <i>et al.</i>			
	AC2	6,259,513	07/2001	Gallatin <i>et al.</i>			
	AD2						
	AE2						
	AF2						
	AG2						
	AH2						
	AI2						
	AJ2						
	AK2						

## FOREIGN PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB-CLASS	TRANSLATION
	AL2						Yes No
	AM2						Yes No
	AN2						Yes No
	AO2						Yes No
	AP2						Yes No

## OTHER (Including Author, Title, Date, Pertinent Pages, etc.)

	AR	<u>2</u>	
	AS	<u>2</u>	
	AT	<u>2</u>	

EXAMINER

DATE CONSIDERED

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